Tennessee Department of Environment and Conservation Memorandum

Date: April 22, 2016

To: Cathy Stoecker; Brad King

From: Brandi Stimson

Subject: Quality Assurance Performance Audit

Site: Hillwood: 47-037-0036

On March 29, 2016, personnel from the Quality Assurance section conducted performance audits on selected ambient air monitors. The following is a summary of the parameters and values measured.

Site & Instrument Hillwood: 47-037-0036	Measured Parameter	Audit Value	Monitor Response	Difference	Acceptable Range
Thermo 2025	Sample Flow	16.59 lpm	16.68 lpm	0.5 %	+/- 4 %
Serial# 20228	Barometric Press.	752 mm	752 mm	0 mm	+/- 10 mm
	Ambient Temp.	17.2 °C	15.7 °C	- 1.5 °C	+/- 2 °C
	Filter Temp.	18.1 °C	16.4 °C	- 1.7 °C	+/- 2 °C
	Clock Time	11:57:00 cst.	11:56:58 cst.	- 00:00:02 min.	+/- 00:01:00 min.

Remarks:

- 1. All measured parameters were within acceptable limits.
- 2. It is noted that the ambient and filter temperatures on 2025 Serial# 20228 are -1.5 °C and -1.7 °C, respectively, which is close to the acceptable range of +/-2 °C.
 - The auditor waited several minutes to ensure that the temperature sensors had ample time to adjust and record an accurate reading.

Recommendations:

1. It is recommended that the ambient and filter temperature values are watched carefully during monthly maintenance and/or the sensors are recalibrated or replaced to ensure that they remain within 2 °C.

If we can be of any further assistance or should there be questions regarding this audit, please contact Brandi Stimson by email at Brandi.Stimson@tn.gov or by phone at (615) 687-7035.

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cc: R. Brawner, APC

J. Stephens, APC

^{*}Streamline Pro SN# C150304 and www.time.gov were used by Quality Assurance personnel to conduct this audit.